

177

Quarterly Journal of Microscopical Science

JOINT EDITORS

C. F. A. PANTIN, Sc.D., F.R.S.

JOHN R. BAKER, D.Sc., F.R.S.

QH
201
Q2

VOLUME 99. Third Series

Published for the Company of Biologists Limited

OXFORD: AT THE CLARENDON PRESS

1958

CONTENTS

Volume 99, Part 1

Rothschild, Lord. The Surface of the Sea-urchin Egg	1
Simkiss, K., and Tyler, C. Reactions between Egg-shell Matrix and Metallic Cations	5
Clayton, Blanche-P., Deutsch, K., and Jordan-Luke, B. M. The Spermatid of the House-cricket, <i>Acheta domesticus</i>	15
Hewitt, W. The Absorption of Oleic Acid from the Small Intestine of the Rat	25
Locke, M. The Formation of Tracheae and Tracheoles in <i>Rhodnius prolixus</i>	29
Endean, R. The Coelomocytes of <i>Holothuria leucospilota</i>	47
Bultitude, K. H. A Technique for Marking the Site of Recording with Capillary Micro-electrodes	61
Chesterman, W., and Leach, E. H. A Bleaching Method for Melanin and two Staining Methods	65
Lewis, P. R. A Simultaneous Coupling Azo Dye Technique suitable for Whole Mounts	67
Highnam, K. C. Activity of the Brain/Corpora Cardiaca System during Pupal Diapause 'Break' in <i>Mimas tiliae</i> (Lepidoptera)	73
Mauchline, J. The Vascular System of Crustacean Compound Eyes, especially those of the Euphausiid, <i>Meganocytiphanes norvegica</i>	89
Fänge, R. The Structure and Function of the Gas Bladder in <i>Argentina silus</i>	95
Shaffer, B. M. Integration in Aggregating Cellular Slime Moulds	103
Fauré-Fremiet, E. The Origin of the Metazoa and the Stigma of the Phytotflagellates	123

Volume 99, Part 2

Bradbury, S. A Cytological and Histochemical Study of the Connective-Tissue Fibres of the Leech, <i>Hirudo medicinalis</i>	131
Bradbury, S., and Meek, G. A. A Study of Fibrogenesis in the Leech, <i>Hirudo medicinalis</i>	143
Chopra, H. C. A Morphological and Histochemical Study of the Oocytes of the Fish, <i>Ophiocephalus punctatus</i> , with particular Reference to Lipids	149

Rosenbaum, R. M. Histochemical Observations on the Cortical Region of the Oocytes of <i>Rana pipiens</i>	159
Highnam, K. C. Activity of the Corpora Allata during Pupal Diapause in <i>Mimas tiliae</i> (Lepidoptera)	171
Beedham, G. E. Observations on the Mantle of the Lamelli-branchia	181
Beedham, G. E., and Trueman, E. R. The Utilization of I^{131} by Certain Lamellibranchs, with Particular Reference to Shell Secretion	199
Clark, R. B. The Gross Morphology of the Anterior Nervous System of <i>Nephtys</i>	205
Ryder, M. L. Some Observations on the Glycogen of the Wool Follicle	221
Chou, J. T. Y. A Note on the Preservation of Adipose Lipid	229
Berenbaum, M. C. The Histochemistry of Bound Lipids	231
Bone, Q. Synaptic Relations in the Atrial Nervous System of <i>Amphioxus</i>	243
Jones, W. C. The Effect of reversing the Internal Water-current on the Spicule Orientation in <i>Leucosolenia variabilis</i> and <i>L. complicata</i>	263
Chou, J. T. Y., and Meek, G. A. The Ultra-fine Structure of Lipid Globules in the Neurones of <i>Helix aspersa</i>	279

Volume 99, Part 3

Chou, J. T. Y. Experiments on the Fixation of Lipids by Osmium Tetroxide	285
McMinn, R. M. H. The Action of Colchicine on the Intestinal Epithelium of the Cat and Dog	289
Reid, B. L. Some Cytological Features of Epididymal Cells in the Rat	295
Nath, V., Gupta, B. L., and Lal, B. Histochemical and Morphological Studies of the Lipids in Oogenesis. I. <i>Periplaneta americana</i>	315
Hess, A. The Fine Structure and Morphological Organization of the Peripheral Nerve-fibres and Trunks of the Cockroach (<i>Periplaneta americana</i>)	333
Beedham, G. E. Observations on the Non-calcareous Component of the Shell of the Lamellibranchia	341
Krishnan, G. Some Aspects of Cuticular Organization of the Branchiopod <i>Streptocephalus dichotomus</i>	359
Locke, M. The Co-ordination of Growth in the Tracheal System of Insects	373

Dutt, N. Observations on the Genital System and Alimentary Canal of a Lamiid Beetle, <i>Nupserha bicolor</i>	393
Sund, P. N. A Study of the Muscular Anatomy and Swimming Behaviour of the Sea Anemone, <i>Stomphia coccinea</i>	401
Lele, P. P., Palmer, E., and Weddell, G. Observations on the Innervation of the Integument of Amphioxus, <i>Branchiostoma lanceolatum</i>	421

Volume 99, Part 4

Wigglesworth, V. B. The Distribution of Esterase in the Nervous System and other Tissues of the Insect <i>Rhodnius prolixus</i>	441
Steedman, H. F. Dimethyl Hydantoin Formaldehyde: A new Water-soluble Resin for Use as a Mounting Medium	451
Clayton, B.-P. Unmasking of Sudanophil Lipid in the Testis of the House-cricket, <i>Acheta domesticus</i>	453
Baker, J. R. Note on the Use of Bromophenol Blue for the Histochemical Recognition of Protein	459
Grant, J. H. The Uptake of Intravital Dyes by the Testis	461
George, J. C., and Scaria, K. S. A Histochemical Study of Dehydrogenase Activity in the Pectoralis Major Muscle of the Pigeon and certain other Vertebrate Skeletal Muscles	469
Nath, V., Gupta, B. L., and Manocha, S. L. Histochemical and Morphological Studies of Lipids in the Oogenesis of <i>Pheretima posthuma</i>	475
Menzies, G. Observations on the Developmental Cytology of the Fundic Region of the Rabbit's Stomach, with Particular Reference to the Peptic Cells	485
Austin, A. P., Crisp, D. J., and Patil, A. M. The Chromosome Numbers of certain Barnacles in British Waters	497
Clark, R. B. The 'Posterior Lobes' of <i>Nephtys</i> : Observations on three New England Species	505
Grégoire, Ch. The Cultivation in the Living Organism of the Thymus Epithelium of the Guinea-Pig and Rat	511
Dutta, G. P. The Cytoplasmic Inclusions of <i>Nyctotherus macropharyngeus</i> : Histochemical Studies	517
Grimstone, A. V., Horne, R. W., Pantin, C. F. A., and Robson, E. A. The Fine Structure of the Mesenteries of the Sea-Anemone <i>Metridium senile</i>	523